Claims

1. Hot-melt pressure-sensitive adhesive based one or more non-thermoplastic elastomers, at least comprising
100 parts by mass of the non-thermoplastic elastomer(s),
from 1 to 200 parts by mass of one or more tackifying resins, and also
one or more polyfunctional isocyanates which are free from blocking agent, the hot-melt pressure-sensitive adhesive comprising from 8 mmol to 5 mol of the reactive isocyanate groups of the isocyanate per kilogram of the non-thermoplastic elastomer(s) used.

2. Hot-melt pressure-sensitive adhesive according to Claim 1, characterized in that the non-thermoplastic elastomers are selected from the group consisting of natural rubbers, random-copolymerized styrene-butadiene rubbers (SBR), butadiene rubbers (BR), synthetic polyisoprenes (IR), butyl rubbers (IIR), halogenated butyl rubbers (XIIR), ethylene-vinyl acetate copolymers (EVA) and polyurethanes.

3. Hot-melt pressure-sensitive adhesive according to Claim 2, characterized in that it comprises a polymer blend of one or more of the non-thermoplastic elastomers and one or more thermoplastic elastomers selected from the group consisting of polypropylenes, polyethylenes, metallocene-catalysed polyolefins, polyesters, polystyrenes and synthetic block copolymer rubbers.

4. Hot-melt pressure-sensitive adhesive according to Claims 1 to 3, characterized in that the blocking-agent-free isocyanate comprises a mixture of different isocyanates which are distinguished by different reactivities.

5. Hot-melt pressure-sensitive adhesive according to Claims 1 to 4, characterized in that the crosslinking of the blocking-agent-free isocyanate is accelerated by means of a catalyst.

6. Hot-melt pressure-sensitive adhesive according to Claim 1 to 5, characterized in that fillers are added to the adhesive which are selected in particular from the group consisting of metal oxides, chalks, precipitated or pyrogenic silicas, solid or

hollow glass beads, microballoons, carbon blacks and/or glass fibres or polymer fibres.

7. Hot-melt pressure-sensitive adhesive according to at least one of the previous claims, characterized in that plasticizers are added to the adhesive which are selected in particular from the group consisting of paraffinic or naphthenic oils, oligomeric nitrile rubbers, liquid isoprene rubbers, oligobutadienes, soft resins, wool fats and/or rapeseed oils and castor oils.

8. Self-adhesive article obtained according to at least one of the preceding claims, characterized in that the hot-melt pressure-sensitive adhesive is applied to at least one side of a web-form material.

9. Self-adhesive article according to at least one of the previous claims, characterized in that the thickness of the hot-melt-pressure-sensitive adhesive on the web-form material is between 5 µm and 3000 µm, preferably between 15 µm and 150 µm.

10. Self-adhesive article according to at least one of the previous claims, characterized in that the hot-melt sensitive adhesive is applied in a thickness of from 20 µm to 3000 µm, in particular from 40 µm to 1500 µm, to a release paper having an anti-adhesive coating on both sides.

11. Process for producing self-adhesive articles, especially for producing high-performance self-adhesive articles such as tapes or labels, characterized in that the hot-melt pressure-sensitive adhesive is applied with the aid of a multi-roll applicator unit which comprises from two to five rolls.